4.13 ENVIRONMENTAL JUSTICE

In Section 3.13, the U.S. Department of Energy (DOE) identified the minority and low-income populations in the project area pursuant to Executive Order (EO) 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations* (59 FR 7629, 16 February 1994). This section discusses the potential for environmental justice impacts to those populations.

Methodology

Environmental justice impacts can result if the proposed activities cause disproportionately high and adverse human health or environmental effects to minority or low-income populations. DOE assesses three factors to the extent practicable to identify disproportionately high and adverse environmental effects:

- Whether there would be an impact on the natural or physical environment that significantly and adversely affects a minority population, low-income population, or Indian tribe. Such effects may include ecological, cultural, human health, economic, or social impacts on minority communities, low-income communities, or Indian tribes when those impacts are interrelated to impacts on the natural or physical environment.

- Whether environmental effects would be significant and are or may be having an adverse impact on minority populations, low-income populations, or Indian tribes that appreciably exceeds or is likely to appreciably exceed those on the general population or other appropriate comparison group.

- Whether such environmental effects occur or would occur in a minority population, low-income population, or Indian tribe affected by cumulative or multiple adverse exposures from environmental hazards.

4.13.1 Western, Central, and Crossover Corridors

As shown in Section 3.13.1, five of the census block groups intersected by the Central Corridor, and six of the census block groups intersected by the Western and Crossover Corridors, exceed the meaningfully greater minority population percentage. Also, one of the ten census block groups intersected by the proposed corridors (where the corridors are common) exceeds the low-income population threshold. As shown in Figures 3.13–1 and 3.13–2, the census block groups that *would be* intersected by the proposed corridors are of a similar composition to those that *would not be* intersected by the proposed corridors (that is, the corridors do not pass through concentrated pockets of low-income or minority populations). Nonetheless, the following describes the potential environmental impacts of the proposed project in terms of any special circumstances or mechanisms through which low-income or minority populations may experience disproportionately high and adverse human health or environmental effects.

The main environmental impacts to minority and low-income residents within the proposed project area would be in the form of changes to the visual setting from the presence of the transmission line and supporting towers, and impacts to recreational resources. The area evaluated for potential effects on visual and recreational resources is the entire area (and viewshed) of the valleys and mountains from Tucson to Nogales, Arizona. Although a few residential areas in Sahuarita, Nogales, Amado, and Tubac would experience a change in visual setting, great parts of the corridors would run through uninhabited areas or would not be visible from residential or recreational areas. Some residences near Sahuarita and Nogales would experience a change in foreground (within 0.5 mi [0.8 km]) visual setting under any of the alternatives, while some residences near Amado and Tubac would experience a change in foreground

visual setting for the Central Corridor only. The residences located further away from the proposed transmission line would likely experience less visual impact as the degree of discernible detail decreases with distance.

DOE has not attempted to quantify the visual impacts because of their subjective nature, and because they are likely to differ from one person to another as they each would view the proposed transmission line from their own vantage point.

The Coronado National Forest and trails and unpaved roads outside of the national forest lands provide recreational opportunities. The transmission line may impact recreational resources in the area of the corridor by disturbing the visual setting over the long term. Construction of the transmission line may cause temporary impacts to recreational resources, such as road closures. However, these impacts would be of short duration in any one location, and recreational resources are used by both the general population and low-income and minority residents.

Neither DOE nor its cooperating agencies are aware of any special circumstance that would disproportionately impact minority or low-income populations, such as unique exposure pathways or practices among the minority or low-income populations, or food gathering practices specific to low-income or minority populations.

The proposed project is within the traditional territories of several Native American tribes. DOE initiated formal government-to-government consultation in a letter sent to tribal governments of the 12 Native American communities/tribes/nations that are likely to have traditional concerns in the area. Seven of the 12 tribes contacted have indicated to DOE representatives that they have concerns about the proposed project, but to date have not named specific locations of any traditional cultural properties (TCPs) or sacred sites.

Long-term electric and magnetic field (EMF) exposure from the proposed transmission line to the nearest residences, schools, and commercial establishment would be well below 0.8 milliGauss (mG) per day, which is equivalent to the average daily exposure to maximum magnetic fields from some common household appliances (see Table 3.10–1 for a list of EMF levels of some common household appliances). Therefore, the surrounding population would not be impacted by EMF exposure, and no mechanism has been identified for minority or low-income populations to be disproportionately affected.

The population in the regional airshed of southern Arizona would not be impacted by the temporary increase in air pollutant emissions during construction, and no mechanisms have been identified for minority or low-income population to be disproportionately affected during construction or operation of the project.

The potential noise impacts of the construction and operation of the proposed corridor alternatives would create annoyance primarily to the residents nearest to the right-of-way (ROW) during the construction period. The noise levels would be temporary and intermittent, and no construction would occur between the hours of 10 p.m. and 7 a.m. Therefore, the surrounding population would not be impacted by the noise generated from the proposed project, and no mechanism has been identified for minority or low-income populations to be disproportionately affected.

On the basis of the foregoing discussion, DOE concludes that no disproportionately high and adverse impacts, for the resource areas discussed above, would be expected for minority or low-income populations.

For all other resource areas (that is, land use, socioeconomics, biology, geology and soils, water resources, infrastructure, and transportation), DOE concludes that, because the proposed corridor alternatives would be purposely sited away from residential areas and in sparsely populated areas in order to avoid impact on large numbers of residences, no potential for disproportionately high and adverse impacts among minority or low-income populations would be expected.

The potential for cumulative impacts to minority or low-income populations from the proposed project in combination with other past, present, and reasonably foreseeable future actions is addressed in Chapter 5, Cumulative Impacts.

4.13.2 No Action Alternative

Under the No Action Alternative, Tucson Electric Power Company (TEP) would not build the proposed transmission line and the associated facilities as proposed in the Environmental Impact Statement (EIS). No environmental justice impacts would be experienced under this alternative.